347 Madison Avenue
New York, NY 10017-3739
212-532-4900

Howard Permut
President

Metro-North Railroad

August 23, 2011

An Open Letter to Metro-North Railroad Customers

After listening to the public speakers at our recent Customer Forum about the heat-related incidents that occurred on the New Haven Line on July 22, 2011, the feedback has been heard loudly and clearly. And we are acting immediately. Underway are improvements to customer communications and emergency protocols for response to future incidents.

I want to assure all our customers--and in particular our New Haven Line commuters—that every Metro-North employee strives to provide safe and excellent customer service on a daily basis, and we will do everything within our control to rectify the shortcomings that occurred on July 22.

It is a point of pride that Metro-North's conductors consistently get high marks on our annual customer satisfaction surveys. The incidents on July 22 were anomalies and we will work tirelessly to ensure they never occur again. Better communication between the crew of the disabled train near Westport and its customers would have helped alleviate the resultant poor conditions. Other trains were disabled on that day in the same overheated conditions, however, on those trains the difference was better on-board communication. Metro-North will begin training crew members on crisis communications to ensure that they are better prepared to keep customers informed during an emergency.

As part of our intensive review of the incidents, we have outlined a list of 20 actions to be completed by the end of the year. A complete listing follows this letter in addition to the complete report.

Key actions include:

- Improving emergency procedures for train crews that focus on customer service.
- Enhancing our incident response to ensure better coordination with first responders.
- Conducting a comprehensive review of train crew training, with a focus on improving customer communications and service.
- Expanding our operating protocols to better address excessive heat situations.
- Improving communication during incidents to ensure timely and accurate information is provided both internally and externally.

We will also continue to work with the Connecticut Department of Transportation to rebuild the obsolete infrastructure as expeditiously as possible.

In closing, I again apologize for our failings on July 22 and I pledge my full commitment to implementing our plan to improve customer communications and emergency response.

Sincerely,

Howard Permut

Action Plan

Enhancing Incident Command/Emergency Response

Meet with local first responder organizations to ensure unified protocols and procedures
- Town of Westport
- All Connecticut communities

Review and improve emergency procedures for train crew to ensure overall adequacy.
- Customer Care - Develop specific protocols that focus on determining the welfare of customers and action plan for those in distress
- Asking for customer volunteers to assist
- First aid requirements/training

Ensure all train crew have operable radios

Ensure better coordination between the scene of incidents and the Operations Control Center and the Customer Communications Center

Stock additional vehicles with water and other customer comfort items for use in emergencies

Conducting A Review of Train Crew Training

Review train crew training
- Evaluate and improve adequacy of communication modules (during regular operation and during emergencies)
- Issue palm cards to conductors to remind/reinforce communication elements and key announcements for different types of incidents
- Begin intensive internal communication/retraining and include fall back-system if normal means of communication is not operational
- Institute periodic alerts to conductors that demonstrate the importance of communication/customer service.
- Institute drills for communication skills

Expanding Operating Protocols

Expand formal planning process to include excessive heat situations

Establish additional speed restrictions for use during high-heat situations

Create more conservative service plans for use during instances of extreme temperatures/weather conditions, especially for use in areas of the New Haven Line that have over-age wire or that are undergoing construction and have reduced track capacity

Improving Customer Communication

Review protocols for and reinforce importance of using public address system for announcements
- On trains
- At stations

Create new announcement that can be used while assessments are being made and there is no new information to share.

Institute new announcement on trains alerting customers to “hot cars” on consists

Review protocols between Operations Control Center and new Customer Communication Center to ensure timely customer information

Review all protocols within the new Customer Communication Center for both audio and visual information to ensure accuracy and consistency

Provide more detailed information to customers when an incident occurs via
- e-mails
- web
- digital signs at outlying stations and GCT

Create a series of pre-planned e-mail messages for use during excessive heat, including warnings for service impacts

Develop a system to communicate service status updates to all frontline employees

Evaluate Ticket Issuing Machines having the capability to receive messages/information from a central MNR facility to on-board train crews.

Publicize the availability of real-time information using Metro-North Train Time and CooCoo

Future Plans

Conduct a table top exercise to drill against both existing and new protocols before the end of the year

Metro-North Railroad

A Review of the Actions Taken by Metro-North Railroad in Response to Multiple Heat-Related Incidents on the New Haven Line July 22, 2011

I. Current Condition of the New Haven Line

Background

New Haven Line is not only the busiest rail line operated by Metro-North Railroad, it is the busiest rail corridor in the United States. A total of 390 MNR & Amtrak trains operate on the line every day. MNR trains alone carry 37.3 million people annually, 47% of all Metro-North East-of-Hudson customers.

The line is operated under a comprehensive service agreement between the Metropolitan Transportation Authority in New York and the State of Connecticut through the Connecticut Department of Transportation. Infrastructure improvements within each state are the responsibility of that state. Day-to-day operation of the line is the responsibility of Metro-North Railroad.

Infrastructure/Physical Characteristics

The New Haven Line extends 73 miles from Grand Central Terminal in New York City to New Haven, Connecticut. In addition to a predominantly 4-track main line, there are three single-track branch lines: New Canaan, Danbury and Waterbury branches.

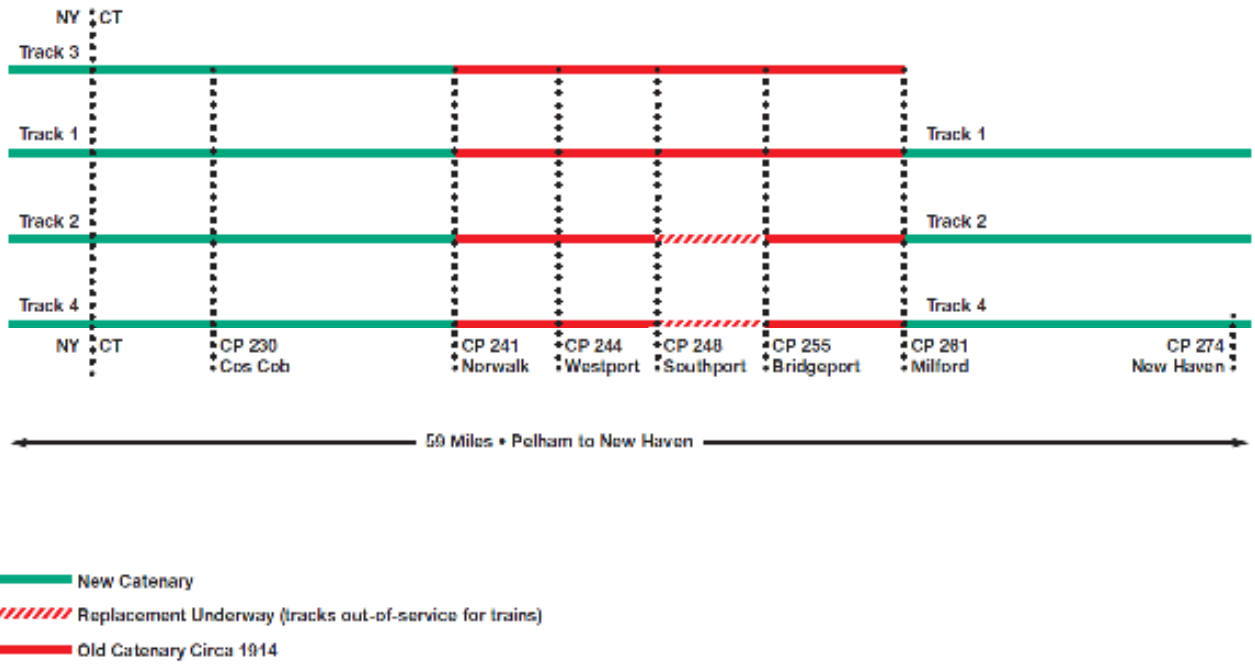
Trains operate under two different power sources -- overhead catenary (A/C) and third-rail (D/C) power, converting from one power source to the other while moving. No other railroad in the United States requires this type of operation, making the New Haven Line the most complex operation in the United States.

Portions of the overhead catenary system on the New Haven Line date to 1914. A key feature of this old catenary system is that it is prone to failure in either extreme heat ("sagging wire") or extreme cold ("brittle wire"). Specifically, when wires are sagging, they can become tangled in the "pantographs" -- the mechanical arms on the top of the cars that collect the power and provide it to the train – both disabling the train and potentially tearing down wires that require sections of track to be taken out of service for lengthy periods of time.

The New York State portion of the catenary system was successfully renewed in 1993 with a state-of-the-art design that features constant tension. As the name implies, this type of construction can better accommodate temperature extremes. It is noteworthy that there were no catenary failures in the portion of the line with the constant tension design.

CDOT commenced its catenary replacement in 1996. Completion is planned for 2015. Today, of the 172 miles of catenary on the New Haven Line in the State of Connecticut, 60% is the new constant tension system and 40% is either the original antiquated system or out of service for repair. MNR's operation is particularly vulnerable in the 7-mile stretch between Southport and Bridgeport. Of the four tracks in that area, 2 tracks are out of service for catenary replacement and bridge work; all trains, therefore, must operate on the other two tracks under old catenary. This system is decades past its useful life and the fragile condition of the system leads to regular failures, significantly impacting service reliability.

Current Status of New Haven Line Catenary System



Railcar Fleet

New Haven Line service is operated with an electric car fleet as well as a limited number of diesel locomotive-hauled coach configurations. The average age of New Haven Line electric railcar fleet is 32 years (vs. M7 fleet in New York which averages 6 years). To date, there are 30 new M8 cars, which constitute 8.5% of the electric fleet required to operate New Haven Line service every day. Starting in September, approximately 10 cars per month will be delivered through 2014 at which time all over-age cars will be retired.

Fleet reliability for the older M2/M4/M6 cars is poor and maintenance requirements are high. In addition, the design of these cars, based on 1940s technology, is clearly inadequate for today's operational needs. This inadequacy is evidenced in the various systems, such as the propulsion and air-conditioning systems.[1]

II. Events on July 22, 2011

Preparation

In the days immediately preceding July 22, temperatures in the New York/Connecticut area consistently approached or exceeded 90 degrees. On that day specifically, the air temperature topped 100 degrees (103-109 degrees) at various locations, breaking records.

On Friday, July 22, Metro-North was operating a regular summer weekday schedule with additional trains to Yankees-East 153rd Street Station for a 7:05 PM baseball game. Approximately 105,000 customers were travelling that day, many of whom were carrying luggage for the weekend. On that morning, with high temperatures forecasted, MNR took several actions in advance to prepare for the anticipated heat.

To minimize the risk of sagging wire becoming entangled in train pantographs, at 10 AM train speeds were reduced to 70 mph on straight track and 50 mph on certain curved sections of track. The maximum operating speeds on the New Haven Line are normally between 75-90 mph. Additionally, the Catenary Maintenance Vehicle and a work engine were dispatched to inspect continually the old catenary system for slack/sagging wire and make repairs expeditiously. Train crews were also instructed to be alert to the condition of the wire as they operated their trains over the line.

[1] *Note that these are the same cars that are prone to snow ingestion and had an extremely high failure rate this past winter.*

MNR forces were also instructed to put "hot cars"[2] into service only if absolutely required. However, they were struggling to balance the quality of the train car interior temperatures with providing sufficient train cars for service, making difficult decisions as to whether to run trains with insufficient cars or even cancel them as opposed to operating the train with some cars that were hot.

Metro-North personnel made plans to revise the normal operation plan and operate two mid-afternoon trains out of Grand Central Terminal as diesel trains and not electric trains. MNR and the MTA Police Department prepared vehicles to be used in an emergency, stocking them with bottled water and other supplies. The MNR vehicles were pre-positioned in Stamford, Bridgeport and New Haven. MTA PD vehicles were on routine patrol along the New Haven Line. These vehicles would be used to respond to any incident involving trains that were disabled and had no power and, therefore, no air conditioning.

Heat-Related Incidents

Throughout the morning and early afternoon, MNR experienced an escalating number of heat-related incidents on the New Haven Line especially in the area east of Stamford. In the period between Noon and 2 PM, MNR crews were at 7 locations, responding to significant problems that prevented the railroad from operating normal service.

At 11:56 AM, a Track Foreman on routine patrol finds a damaged piece of rail at a switch between Harrison and Rye.[3] Westbound trains are unable to operate over the switch; eastbound trains are restricted to operating over it at 10 mph.

At 12:42 PM, the overhead wire grounded out between Stratford and east of Milford station. The crew of the train in that section reported to the Operations Control Center that the pantograph on one of its cars came down on its own, possibly due to sagging wire. After localizing that pantograph and ensuring that it would remain down, the train proceeded east and arrived in New Haven 10 minutes late.

At 12:59 PM, the Catenary Maintenance Vehicle reported sagging auxiliary wire on track #3 east of Fairfield Station. Trains were allowed to continue operating, however, they had to lower their pantographs in that area.

At 1:34 PM, a switch between Green's Farms and Southport became stuck in one position. The heat had so expanded the rails that they were unable to lock properly in any other direction.

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[2] *Hot cars are defined as cars that had no operable air conditioning. Note that at the start of the day, 30% of the M2/4/6 cars available for service were considered uncomfortable with interior temperatures registering at 80 degrees or above.*

[3] *In addition to catenary problems, the excessive heat caused track and switch problems due to rail expansion along the entire New Haven Line.*

Also at this time, MNR saw the first of 3 power outages because of overloaded circuit breakers in the Stratford area[4].

At 1:42 PM, a Track Foreman reported that the heat had caused the rail to expand to such a degree that it disturbed the track alignment in the Rowayton area. While it was determined that trains could operate over this heat "kink" in the rail, they were restricted to 30 mph. This speed restriction was later lowered to 10 mph and expanded to the area between Rowayton and South Norwalk.

After 1:30 PM, there were two significant incidents that resulted in disabled trains and significantly delayed customers. Both trains were unpowered for a period of time, putting customers in a situation in which they were in train cars with no lights or air conditioning. One incident immediately followed the other and both were within 11 miles of each other.

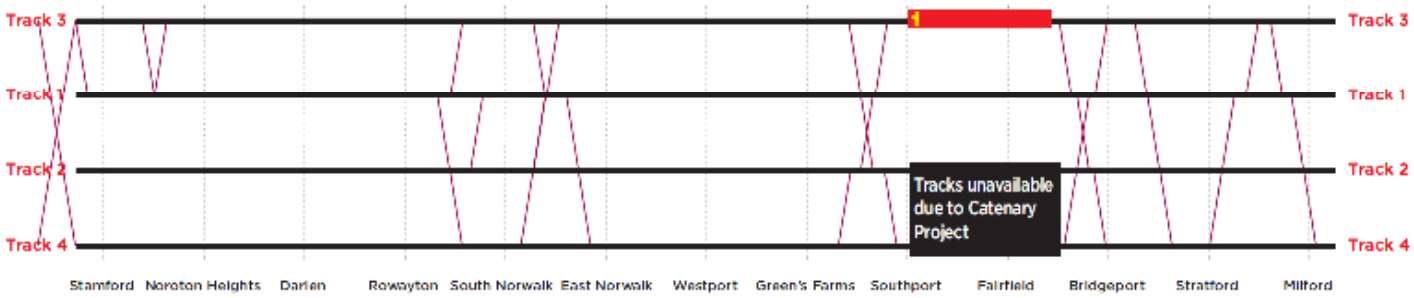
Train # 1526

At approximately 1:34 PM, the same time that the switch east of Green's Farms became stuck, MNR's Operations Control Center saw that another ground in the overhead wire was registering between Bridgeport and Stratford on track #4. Train #1526 (the 12:07 PM out of Grand Central Terminal, due New Haven at 1:52 PM) was disabled across a switch in that location. At this point, there was no power going to the train and customers were on board with no lights or air conditioning. (The air conditioning survey conducted on this train prior to departure from Grand Central indicated that the air conditioning was working and that the car interior temperatures were registering in the high 70 degree levels.)

The crew reported that one of the train's pantographs had snapped off after becoming tangled in sagging wire. In addition to the pantograph being damaged, the crew additionally reported wire damage at that location. Coincidentally, a locomotive that was being used by MNR employees to inspect for sagging wire had just arrived in the vicinity of Stratford. It was sent to rescue this disabled train. The rescue locomotive arrived at 2:10 PM as did MTA PD who had transported bottled water to the site. Over 40 cases of water were distributed to customers by MNR employees and MTA Police Officers.

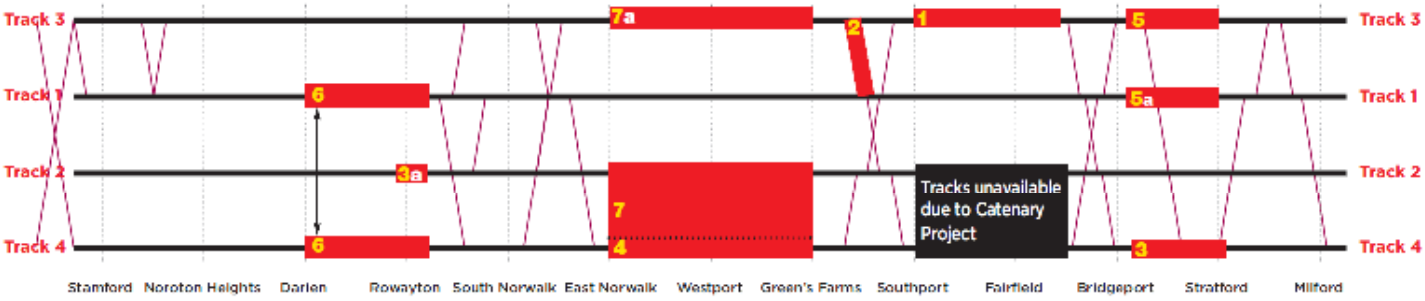
[4] *These circuit breakers are also approximately a century old and are being replaced.*

New Haven Line
East of Stamford
July 22, 2011
Before 1:30 PM



1	CMV Inspection/Sagging Wire	12:59 PM - 2:45 PM

New Haven Line
East of Stamford
July 22, 2011
After 1:30 PM



1	CMV Inspection/Sagging Wire	12:59 PM - 2:45 PM
2	13 at CP 248 Switch Failure	1:34 PM - 11:00 PM
3	Train 1526 Pantograph Damage	1:34 PM - 3:14 PM
3a	10 mph Track Kink	1:42 PM - 11:59 PM
4	Train 1532 Sagging Wire	2:51 PM - 9:15 PM
5	Train 1573 Pantograph Damage	4:24 PM - 8:04 PM
5a	Train 1169 Rescue of Train 1573	4:25 PM - 5:37 PM
6	Transformer Fault at South Norwalk	4:32 PM - 6:25 PM
7	Train 1536 Disabled at CP 241	4:31 PM - 6:25 PM
7a	Train 1538 Rescue of Train 1536	4:40 PM- 4:59 PM

Because of the damage to the railcars and the overhead wire, the determination was made that the best way to rescue the train was to move all 350 customers into the first 5 cars which were undamaged so that those cars could be separated from the damaged equipment and the locomotive could pull them all to safety. This decision was not easily accomplished. Transferring customers was difficult and time consuming as there were young children who required extra care. Also many of these customers had bulky items with them (e.g. luggage, baby carriages) which also had to be moved from car to car. MNR emergency crews who had responded to this train began to prepare the train for movement, climbing on top of the cars to lock down the damaged pantographs, climbed between and under the cars to cut away the damaged triplet and attach the locomotive.

At 2:25 PM, 49 minutes after the train first became disabled, it had power restored, including lights and air conditioning, and was on the move east. The train arrived at Stratford Station at 2:35 PM, where customers were to connect with a train for the remainder of their trip. Since the train now had lights and air conditioning, customers were encouraged to wait for their new train on these cars. The rescue train arrived, customers re-boarded and arrived in New Haven one hour and 44 minutes late.

At this point, there was only one operational route for 22 miles between Stamford and Bridgeport, and operating over that route required significant switching between tracks. The decisions being made by the employees in the Operations Control Center, always critical and urgent, were much more difficult as they had to ensure that any train movement and routing did not cause further damage, disrupting even more customers as they were travelling.

Train #1532

At 2:51 PM, the Rail Traffic Controller monitoring New Haven Line operations in the Operations Control Center saw that train #1532 (the 1:34 PM train out of Grand Central Terminal, due New Haven Station at 3:18 PM) had stopped on track #4 at catenary pole 619, milepost 46.5 (between Westport and Green's Farms stations).

Once the train became disabled, the train crew was required to perform a number of tasks. First, the crew inspected both the train and the conditions of the right-of-way outside the train. Providing accurate information of this nature to the Operations Control Center is essential so that a rescue plan can be formulated and/or repair crews dispatched.

Initially, reports from the scene indicated that the train was trapped in place by wire that was sagging to such a degree that it was only 1 foot above the top of the train. As the train crew continued their inspection, they found that one of the pantographs and a

portion of the wire were also damaged. Attempts to raise other pantographs on the train to maintain a connection with the overhead wire were made but were unsuccessful. The electricity to the train, which had turned off when train #1532 became disabled, would now remain off for the entire time the train was stationary – including the power needed for lights and air conditioning.

It is important to note that the air conditioning on this train had not been working well before the train became disabled. The seven cars on this train were checked in Grand Central prior to departure. The ambient temperature on platform at the time was 102 degrees. The coolest of the cars registered 81 degrees. Three of the seven cars were over 90 degrees. By the time the train was underway, it was apparent that the air conditioning was not working on any of the rear four cars. A special stop had been made at Stamford Yard to attempt to correct the problem but that attempt was unsuccessful. There were approximately 300 customers on this train.

As the crew was inspecting the wire and the equipment, the temperature inside the car was rising. Conditions for the customers on board this train had become extremely difficult very quickly. Shortly after 3 PM, customers began making calls to 911 and others requesting assistance.

Another essential task during any service disruption is for the train crew to communicate with customers and check on their safety and comfort. The train crew made an initial announcement when the train stopped, advising customers over the public address system that the train was disabled and that they would provide more information when it was available. Customers report that this was the only announcement made utilizing the public address system on the train. The conductor walked through the train once, predominantly to assess the condition of the customers and answer any questions face-to face.

Because the crew was walking through the train, they were aware of the high heat inside the cars. In addition to radioing the Operations Control Center for assistance, they also proceeded to open some of the train doors that were on the “land side” (the side away from the tracks) to provide ventilation. This could only be done when customers were willing to stand at the doors to prevent people from accidentally falling from the train and walking on the tracks. Nonetheless, by 3:20 PM, customers began removing the emergency windows to allow for fresh air to enter the cars. A total of 9 windows were removed in four of the seven cars.

In trying to establish the timeline below for communication with local emergency responders, MNR has relied on conversations that had taken place among all the

different agencies involved: the MNR Operations Control Center, the MTA PD Communications Desk, the Westport Police Department and the Westport Fire Department. These taped conversations are helpful in determining what occurred generally, but may not be fully exact in terms of timing and sequence of events.

The 911 calls from the train were going to the town of Westport Police Department. At the time of these initial calls, Westport Police could not identify the location of the train. They were also handing off information to the Westport Fire Department, since the nature of the calls indicated that customers needed assistance. Westport PD began using GPS technology to locate the train from the callers' cell phone locations. They were also communicating with the MTA PD to determine the train's location and the appropriate response. The MTA PD and the Westport FD were in communication with MNR's Operations Control Center, trying to determine where to send local emergency service personnel and how long the train would be disabled. This activity all occurred between 3:05 PM and 3:15 PM. At 3:15 PM, MTA PD specifically asked the Westport Police for emergency medical response; MTA PD was told that Westport FD was already on the way to assist.

It is important to note that at the time train #1532 became disabled, the MNR Operations Control Center had just overseen the rescue of train #1526 near Bridgeport. In one conversation between the Westport FD and the Operations Control Center, there is an early misunderstanding as to which train was being discussed. The MNR employee initially believed Westport FD was calling about train #1526 and indicated that that train did not have customers on board. This misunderstanding was quickly corrected and the Westport FD representative was put in touch directly with the Chief Rail Traffic Controller.

MNR's Operations Control Center was preparing to bring another rescue train alongside train #1532. This move would be difficult and time-consuming and would block all train traffic in that location. The Control Center communicated that information to the MTA PD at 3:12 PM. The initial timeframe given was that a rescue train would be there in approximately "18-19 minutes." This timeframe was given again 5 minutes later (at 3:17 PM). Because of all the disabled trains, sagging wire and switch malfunctions, providing a rescue train to that location proved impossible and a new plan had to be developed.

The MNR Operations Department employees and MTA Police who had just rescued train #1526 had been notified of this new problem and were sent to train #1532 to provide assistance and manage the railroad's response. At this time, there was a major traffic tie-up on I-95 because of a tractor trailer crash and fire. MTA PD on the scene

provided a police escort for the Operations Division first responders, including lights and sirens, to get the appropriate personnel on scene as quickly as possible.

The site of the disabled train, however, presented its own unique problems. Located just east of the Sherwood Island Connector (near exit #18 on I-95), the tracks in that area are surrounded by woods and a tidal marsh on the south side and by I-95 and a small band of heavy brush on the north side. There was no easy way to gain access to the train.
The responding Metro-North employees parked on a grassy section of I-95 just north of the on ramp from the Sherwood Island Connector and then used chainsaws to cut through the brush to establish both a path to the train and as a location to have a look out/point of contact for emergency responders, once they had arrived. These MNR employees were physically at the site of the disabled train by 3:31 PM – 21 minutes after finishing their work with train #1526 and leaving that location.

Upon their arrival, an Operations Manager observed that several customers had left the train and were walking on the tracks. They immediately requested that no trains be allowed to operate on the tracks in that area to prevent the possibility of a train hitting those customers on the tracks. MTA police officers were sent to help keep customers from leaving the train.

With the MTA Police, employees began distributing the remaining 15 cases of water that had not been used for customers on train #1526; cases of water were placed in the vestibules for customers to distribute through the cars. An assessment was made of the damage to the pantograph and it was determined that the train would be able to move east to Green's Farms station. This decision was made, in part, because it would be easier for first responders to access the train and treat customers at this location. The original plan to perform a train-to-train transfer on the right-of-way, was cancelled. A Maintenance of Equipment Manager climbed up on the roof of the train and locked the pantograph in the down position so that it would not cause further damage to the train or the overhead wires. The undamaged pantographs on the rear four cars were then able to be raised, restoring power to the train. At 3:42 PM, 53 minutes after the train had become disabled, it began to make the 1/2 mile trip east to the Green's Farms station at walking speed to prevent tearing down the sagging wire and causing additional problems. Operations employees on the scene asked the Operations Control Center to send all emergency personnel directly to Green's Farms Station. Unfortunately, one Westport FD truck had already arrived at the scene as the train was beginning to move. That truck was redirected to Green's Farms station.

The train arrived at the station platform on the south side at 3:54 PM. Emergency responders were there, distributing water. Emergency medical service personnel boarded the train to begin assessing customers for injuries. Initially approximately 17 customers indicated they were suffering from the effects of the heat. Of the customers who received treatment, 14 customers improved once they received water and were able to de-train into fresh air. Three customers remained with EMS personnel on the train.

Meanwhile, the Operations Control Center was identifying and dispatching a rescue train to Green's Farms to take these customers east. Plans were being made to have another train (the 2:07 PM out of Grand Central Terminal, due New Haven at 3:59 PM) pull into the station on the north side platform and continue east.
It was estimated that this train could arrive in 15 minutes, but these plans were not yet finalized; there was still only one track available between Stamford and Bridgeport and there were three trains east of Green's Farms that had to be moved to stations before a clear route could be established for this train. Unfortunately, customers on board train #1532 were told over the public address system that their new train would be on the other platform. This information was communicated immediately before the train opened its doors in Green's Farms. When the doors opened, most customers automatically walked over to the other platform as instructed. A small minority of people, in addition to those customers receiving medical assistance, opted to remain on board train #1532.

With many sections of the railroad blocked, it became apparent that an eastbound train could not be pulled into Green's Farms until the westbound trains had operated through that area. It also became apparent that the switch failures west of Green's Farms were making it extremely difficult to route a new train into the station. Another train-to-train transfer (in which customers would walk from the platform through train #1532 into a train next to it) was considered and discussed as an option and discarded, as the Operations Department employees did not want to have customers cross back to the north side platform.

While these options were being evaluated, it was determined that train #1532's equipment could operate to New Haven, making limited stops. This information was communicated to the Operations Control Center. Shortly thereafter, an announcement was made over the station public address system telling customers to return to the south side platform. MNR Operations employees were additionally telling customers on the north side platform that, if they remained there, an empty train with working air conditioning would arrive shortly to take them east. While these two messages were an attempt to give customers options, it only served to confuse and anger them.

At approximately 4:20 PM, train #1532 departed Green's Farms station – one hour and twenty-nine minutes after the train initially became disabled.

Rescuing the rest of the customers from train #1532 proved to become even more difficult. At 4:24 PM, a westbound train between Bridgeport and Stratford became disabled and reported both wire and pantograph damage. The same Metro-North employees who had responded to train #1526 and #1532 now left to respond to that train. They assisted in a train-to-train transfer that was completed at 5:37 PM. Other Operations Department employees remained at the scene, with members of the Westport FD to assist the remaining customers.

Rescue attempts for these remaining customers continued to change as the condition of the railroad continued to change.
Trains continued to be delayed and disabled. At 4:32 PM, a substation fire caused by a blown circuit breaker shut power off to two of the four tracks between Darien and South Norwalk[5]. Of the remaining two open tracks, one had significantly reduced speeds because of the heat kink referenced earlier.

At 4:48 PM, an empty and air-conditioned train was brought into Green's Farms station for the customers who had elected to wait. This train was able to start moving toward New Haven at 5:17 PM. These customers were delayed a total of two hours and thirty-six minutes (2:36).

Additional Incidents & Management Response
Heat related incidents continued to occur throughout the rest of the evening. Trains continued to become disabled, wire continued to sag and break and switches became stuck. Although the transformer feeding the two tracks between Darien and South Norwalk was repaired by 5:52 PM, at 9:03 PM, another substation fire occurred because of overloaded circuit breakers, this time between Fairfield and Bridgeport.

Since similar high-heat was forecast for the next day (Saturday, July 23) as well, MNR decided to take additional precautionary measures. Train speeds were reduced even further on the New Haven Line – down to 50 mph on straight track and 40 mph on select curves. Train service on the Waterbury Branch was cancelled for Saturday and bus service was instituted there instead to free up additional diesel-hauled train sets. These additional diesel-operated trains were used for 2 round trips on the New Haven Line in the mid afternoon time period. Buses were also ordered and put on stand-by on

[5] *These transformers are also approximately 100 years old.*

Saturday just in case the catenary wire continued to disable trains and customers had to be transported between stations in an emergency.

MNR crews continued repairing damaged infrastructure and equipment throughout the weekend, with all repairs completed before Monday morning's peak period. By the end of Friday, 121 New Haven Line trains were delayed a total of 3,404 minutes.

III. After the Incidents - Lessons Learned

A review of the incidents that occurred on July 22 provides several opportunities for MNR to improve its incident response, operating protocols and communication to customers.

It is important to note, however, that these actions cannot fully overcome years of disinvestment in infrastructure and equipment. While the 405 M8 cars currently on order will help significantly to improve the line's operation, it is not the only solution. Continued investment is essential to replace the over-age catenary system as expeditiously as possible.
This challenge is complicated by the need to have adequate trackage to operate a reliable service during the construction period. However, the longer it takes to replace this system, the longer customers will experience delays – both minor and catastrophic. MNR and the Connecticut Department of Transportation will be working together to make this happen.

Additional lessons were learned and improvements identified in the following areas:

Incident Command/Emergency Response
There was initially some concern by some Fire Department personnel in the town of Westport with emergency response coordination between MNR, the MTA PD, the Westport PD and the Westport FD. A separate meeting was held on July 29 with representatives of all these agencies. It was a very productive meeting, with a significant amount of information shared among the agencies and protocols reinforced. (See Attachment #1)

As a result, MNR will conduct similar meetings with all local emergency response organizations in the communities east of Stamford. These meetings will be conducted within the next two months.

MNR has identified additional vehicles which will be stocked with water and other items that may be necessary when responding to emergencies along the right-of-way.

Operating Protocols

Metro-North has procedures in place to reduce train speeds. Trains can operate up to a maximum of 75-90 mph on the New Haven Line. Current procedures allow MNR to reduce the maximum operating speed to 80 mph or lower. On July 22, speeds were reduced to 70 mph on straight track and 50 mph on certain curved sections of track. After the railroad began experiencing significant operating problems, personnel further reduced the speed to 50 mph on straight track and 40 mph on select curves. The process in place to reduce speeds to this level in extremely high heat seems to be insufficient. Therefore, MNR will institute formally a new and more restrictive level of speed restriction – 50 mph on straight track and 40 mph on select curves -- to be operated in the event of a similar high heat situation, especially in the area of the over-age catenary wire still requiring replacement.

MNR will also review creating and implementing more conservative service plans – including the possibility of a significantly reduced schedule operated only with available diesel-hauled trains. These service plans would be prepared for implementation when high heat is forecasted in the future. This reduced schedule would most affect the areas which contain the over-age catenary wire or areas that are under construction and therefore have reduced operating capacity.

Best efforts will be made to communicate this new service, but given the significant impacts on the large number of New Haven Line customers, this reduced schedule will only be deployed when needed to maintain safety.

Communication to Customers

Clearly, the lack of customer communication – in particular on train #1532 – exacerbated customer concern. MNR will review its protocols for making announcements on the public address systems and reinforce the importance of making them -- both at stations and on board trains. In addition to reinforcing the frequency of announcements, an additional announcement will be drafted that lets customers know that we are working to resolve the problem even if there is no new information to tell them.

MNR will also review its protocols between the Operations Control Center and the new Customer Communication Center in North White Plains to ensure that email alerts and other customer messages are sent in the most timely manner possible.

A review of all customer information protocols within the new Customer Communication Center will also be undertaken to ensure that all customer information – both visual and audible -- are consistent and accurate.

In situations in which a train must operate with hot cars, MNR will also ask train crews to make a pre-departure announcement that identifies the hot cars to customers and gives them an option to take that train or wait for a later one.

Future Plans

MNR will conduct a table-top exercise to drill against both existing and new protocols and procedures.

Westport Fire Department

515 Post Road East • Westport, CT. 06880
(203) 341-5000 • Fax (203) 341-5009

Andrew Kingsbury
Chief of Department

Official Press Release – For Immediate Release

This morning Emergency Management officials from the Town of Westport and representatives of Metro-North and the Connecticut Department of Transportation met to discuss the July 22, 2011 Westport stalled train incident.

Today's after-action review with Metro-North proved to be highly productive. Several areas were identified where we believe emergency operations can be improved upon, and all agencies are working cooperatively to reach this goal.

We appreciate Metro-North's willingness to meet here in Westport and to learn from each other's perspective about what happened last Friday. The end result will be smoother operations in the future for both the emergency responders and the commuting public.

Andrew J. Kingsbury
Fire Chief/Emergency Management Director